

What Is Claimed Is:

1. An insulation composition for halogen-free
5 automotive cables, which comprises a matrix resin, 50-200
parts by weight, based on 100 parts by weight of the matrix
resin, of a metal hydroxide flame retardant, and 0.5-20 parts
by weight of an antioxidant, in which the matrix resin
consists of 1-80 parts by weight of a polyethylene resin, 1-
10 80 parts by weight of an ethylene copolymer resin, and 1-20
parts of a terpolymer of polyethylene, acrylic ester and
maleic anhydride.

2. The insulation composition of Claim 1, wherein the
15 polyethylene resin is at least one selected from the group
consisting of linear low-density polyethylene, low-density
polyethylene, medium-density polyethylene and high-density
polyethylene.

20 3. The insulation material of Claim 1, wherein the
ethylene copolymer resin is at least one selected from the
group consisting of ethylene vinyl acetate, ethylene ethyl
acrylate, ethylene methyl acrylate, ethylene butyl acrylate,
and ethylene octene copolymers.

4. The insulation material of Claim 1, wherein the terpolymer of polyethylene, acrylic ester and maleic anhydride is a terpolymer consisting of 1-80 parts by weight of polyethylene, 1-50 parts by weight of acrylic ester and 1-50 parts by weight of maleic anhydride.

5. The insulation material of Claim 1, wherein the metal hydroxide flame retardant is at least one selected from the group consisting of aluminum trioxide and magnesium dihydroxide.

6. The insulation material of Claim 5, wherein the metal hydroxide flame retardant is at least one selected from the group consisting of surface-untreated metal hydroxides, and metal hydroxides whose surface had been treated with silane, amine, stearic acid or fatty acid.

7. The insulation material of Claim 5, wherein the metal hydroxide flame retardant has a particle size of 0.5-30 μm and a specific surface area (BET) of 3-20 mm^2/g .

8. The insulation material of Claim 1, wherein the

antioxidant is at least one selected from the group consisting of phenol, hindered phenol, thioester and amine antioxidants.

5

9. The insulation material of Claim 8, which further comprises a phenolic metal deactivator.

10. The insulation material of Claim 9, wherein the
10 phenolic metal deactivator is used in an amount of 0.1-3.0 parts by weight based on 100 parts by weight of the matrix resin.

11. The insulation material of Claim 1, wherein the
15 composition is not crosslinked.

12. The insulation material of Claim 1, wherein the composition is crosslinked to have a three-dimensional network structure.

20

13. Automotive cable comprising an insulation material which is made of a halogen-free insulation composition for automotive cables as set forth in any one of Claims 1 to 12.